# Puget Sound Salmon Recovery Region Plan Hood Canal Summer Chum'



# GOAL

To protect, restore and enhance the productivity, production and diversity of Hood Canal/Eastern Strait of Juan de Fuca summer chum salmon and their ecosystems to provide surplus production sufficient to allow future directed and incidental harvests of summer chum salmon. The HCCC Board. in considering a recovery plan that can be implemented and meets the desires of the land-use (Counties) and Tribal authorities, further adds that a summer chum salmon recovery plan be designed to provide the Counties with as much certainty as is possible regarding development, growth and land use; as much certainty as is possible for Tribal goals and objectives; and as much certainty as is possible for private landowners.

the Summer Chum Recovery Plan will provide a logic and rationale for recovery of summer chum salmon populations that can be understood by County Commissioners. Tribal governments, local and regional decision-makers and the public.

HOOD CANAL

COORDINATING COUNCIL



Plan Timeframe Initial focus is 12 years



**Estimated Cost** \$136.1 million



**Actions Identified** to Implement Plan



All H plan submitted to NMFS 11/2005

Human **Population** 71,391

**Counties** Parts of Mason, Kitsap, Jefferson, and Clallam

**Treaty Tribes** 

Skokomish, Port Gamble S'Klallam, Jamestown S'Klallam, Lower Elwha Klallam, Suguamish

**Listed Fish** summer chum, bull trout.2 Chinook

**Regional Recovery** Organization **Hood Canal Coordinating** Council

# **MAJOR FACTORS** LIMITING RECOVERY

- Loss of estuary / nearshore/freshwater habitat
- Altered floodplain and channel morphology
- Sedimentation
- Riparian and instream degradation
- Altered hydrology due to habitat loss

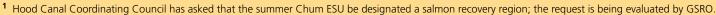
# **KEY ACTIONS RECOMMENDED** TO RECOVER FISH

#### January 2006 to June 2007

- ▶ Riparian and estuary restoration
- ▶ County land use enforcement analysis/needs assessment
- Support zoning regulations that foster salmon recovery
- ▶ Floodplain comprehensive management plans
- Analysis of bulkheads regulations and alternative technologies
- Develop wetland rating system
- Develop public benefit rating system programs for counties
- Expand the geographic reach of the Community Nearshore **Restoration Program**

### **Long Term**

- Address floodplain and estuarine habitat loss along Highway 101 and Seabeck Highway NW
- ▶ Implementation of US Forest Service road maintenance and road abandonment plan
- Voluntary actions to remove railroad grade, fill, dikes, and levees
- Expand geographic reach of the Community Nearshore **Restoration Program** throughout the ESU
- Support zoning regulations that foster salmon recovery
- Monitor effectiveness of actions to facilitate adaptive management



<sup>&</sup>lt;sup>2</sup> USFWS previously published a bull trout recovery plan (2004). The status of bull trout is currently under review and is expected to be complete by early 2006. At that time, USFWS will work with the Regional Board, WDFW, GSRO to incorporate elements of the State's plan into the federal plan.







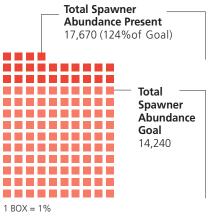
## **Hood Canal Summer Chum Evolutionarily Significant Unit (ESU)** and Context Area

**ESU Boundary** 

Major Population Group (MPG)

# **Summer Chum Spawner Abundance**

| Population      |        | Present | Goal |        |
|-----------------|--------|---------|------|--------|
| Quilcene        | 8,059  |         |      | 2,860  |
| Dosewallips     | 2,777  |         |      | 1,930  |
| Duckabush       | 1,423  |         |      | 2,060  |
| Hama Hama       | 792    |         |      | 3,790  |
| Lilliwaup       | 229    |         |      | 1,960  |
| Union           | 2,000  |         |      | 340    |
| Salmon/Snow     | 2,159  |         |      | 970    |
| Jimmycomelately | 231    |         |      | 330    |
| Total           | 17,670 |         |      | 14,240 |



#### Present abundance

This is expressed as an average from 1993 to 2004.

#### Abundance goal

This is the number of adults needed on the spawning grounds to achieve recovery. Wherever possible it is expressed in natural spawner numbers.

# **Summer Chum Productivity**

| Population      | Present*             | Goal |
|-----------------|----------------------|------|
| Quilcene        | Analyses in Progress | 1.60 |
| Dosewallips     | Analyses in Progress | 1.60 |
| Duckabush       | Analyses in Progress | 1.60 |
| Hama Hama       | Analyses in Progress | 1.60 |
| Lilliwaup       | Analyses in Progress | 1.60 |
| Union           | Analyses in Progress | 1.60 |
| Salmon/Snow     | Analyses in Progress | 1.60 |
| Jimmycomelately | Analyses in Progress | 1.60 |
| Total           | Analyses in Progress | 1.60 |

<sup>\*</sup>Expected Summer 2006

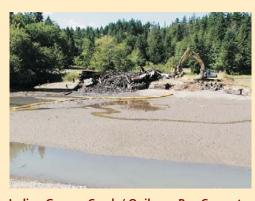
**Productivity:** Population growth rate. This is how many fish return for each fish that spawns. A population must have productivity greater than 1 to increase over time.



**Salmon Creek Channel Restoration** 



**Chimacum Creek Monitoring and Assesment** 



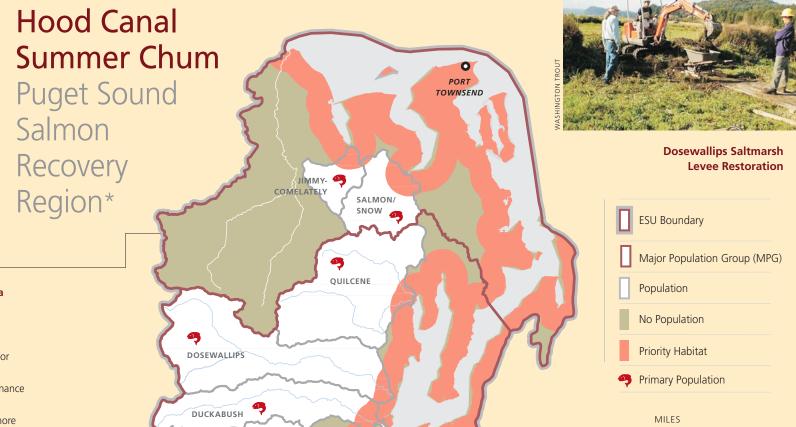
Indian George Creek / Quilcene Bay Creosote and Fill Removal

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Oncorhynchus keta

Live 3-5 years; spend more time in marine waters than any other Pacific salmon; form schools; redds usually dug in mainstem or side channels of low gradient streams, just above tidal influence



UNION

# Eastern Strait of Juan de Fuca **MPG Key Actions**

- ▶ Restore Jimmycomelately Creek-Sequim Bay Estuary
- ▶ Enforce and monitor zoning for Jimmycomelately watershed
- ▶ Implement USFS road maintenance and abandonment plans
- ▶ Implement community nearshore restoration program for Discovery Bay
- ▶ Remove fill, levees along estuary and nearshore to restore marsh and tide flats
- Decommission USFS roads
- Purchase remaining estuary parcels, floodplain
- Restore nearshore and estuarine habitats
- Restore freshwater rearing and spawning habitats
- \* Hood Canal Coordinating Council has petitioned the Governor's Salmon Recovery Office for status as a region.

# **Hood Canal MPG Key Actions**

- ▶ Remove dikes, landfill, and bulkheads as feasible and restore nearshore and estuarine habitats
- Protect spawning and rearing flows in lower Big Quilcene
- ▶ Monitor Lilliwaup Creek, Union/Tahuya, Quilcene and Hama Hama Rivers summer chum supplementation
- Develop comprehensive floodplain management and restoration plan for Lower Hama Hama, Duckabush, Skokomish watersheds

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HOODSPORT